DISEASE WARRIORS – BACKGROUND AND VOCABULARY

**Program connection**

A vaccine protects a person against an infectious disease. It does this by stimulating the immune system to recognize and destroy the disease-causing microbe. Vaccines contain dead or severely weakened versions of the microbe. Once inside a person’s bloodstream, these neutralized microbes trigger an immune response, and the person’s immune system produces antibodies against that particular microbe. These antibodies stay in the bloodstream for many years. If a vaccinated person is then exposed to the fully virulent microbe, these antibodies destroy it before it can make the person ill.

In essence, vaccines trick the body into thinking it has been infected and prepares it to resist a future attack. This ability to prepare the immune system has stopped the spread of infectious diseases, such as smallpox, and led to the near eradication

of polio. Unfortunately, a vaccine against HIV/AIDS has remained elusive. This is

because the virus attacks cells of the immune system, compromising a person’s ability to rid his or her body of the virus.

Before people understood what caused disease, public health workers could only fight epidemics through careful surveillance and quarantine. “Disease Warriors” chronicles the groundbreaking work of 19th century researchers, such as the famed scientist Louis Pasteur, who discovered that germs cause illness and developed some of the first vaccines—one of public health’s greatest triumphs. Today, vaccines have made great strides against disease.

While certain diseases are preventable or can be reduced with vaccines, “Disease Warriors” makes clear that the world still faces major challenges in getting vaccines to all who need them.

IN YOUR OWN WORDS- HAVE DEFINITIONS FOR THE FOLLOWING WORDS:

Antibiotic

Antibody

Bacteria

Immunization

Infectious

Pathogen

Virus